SAILING DIRECTIONS CORRECTIONS

PUB 191 9 Ed 2000 LAST NM 18/01

Page 101—Lines 51 to 54/L; read: **6.4** The NE-bound traffic lane o

6.4 The NE-bound traffic lane of the TSS runs along the SE side of the Dover Strait to the Noord Hinder Junction Precautionary Area, a total distance of 145 miles. The West Hinder TSS branches off the Dover Strait TSS, about 4 miles NE of the N end of Sandettie, and leads E for 20 miles to the pilot station.

The SW-bound traffic lane of the TSS runs along the NW side of the Dover Strait and lies more or less parallel to the NE-bound lane.

Deep Draft Routes for deep-draft vessels follow the NEbound and SW-bound traffic lanes but pass through specific positions known as waypoints.

The NE-bound Deep Draft Route passes to the NW of Sandettie and is recommended by the Netherlands authorities. It leads through that part of the TSS which has been designated a Deep Water Route by the IMO.

The SW-bound Deep Draft Route passes SE of the The Varne and has no official standing.

Inshore Traffic Zones are situated between the coasts and the traffic lanes on both sides of the TSS.

The routes, described below, are divided, as follows:

- 1. NE-bound lane—Greenwich Lightvessel to Les Ridens.
 - 2. NE-bound lane—Les Ridens to Sandettie.
- 3. NE-bound lane—Sandettie to Noord Hinder Junction.
- 4. SW-bound lane—Noord Hinder Junction to the Greenwich Lightvessel.
 - 5. SW-bound Deep Draft Route.
 - 6. NE-bound Deep Draft Route.

Depths in the routes are critical for deep-draft vessels. A number of shoals and wrecks, with depths of less than 20m, lie within the lanes of the TSS. However, these can be avoided by using the Deep Draft Routes.

Greenwich Lightvessel to Les Ridens.—From a position about 6 miles S of the Greenwich Lightvessel, the NE route follows the NE-bound traffic lane, which is 4 miles wide, for 60 miles in a general ENE direction passing:

- 1. SE of Bassurelle.
- 2. NW of Vergoyer.
- 3. SE of Les Ridens.

Les Ridens to Sandettie.—From a position SE of Les Ridens, the NE route follows the NE-bound traffic lane for 27 miles in a general NNE direction passing:

- 1. WNW of ZC1 lighted buoy (50°45'N., 1°27'E.) marking the Boulogne Approach Channel.
 - 2. ESE of The Ridge (Le Colbart).
- 3. WNW and NW of ZC2 lighted buoy (50°54'N., 1°31'E.).
 - 4. SE of MPC lighted buoy (51°06'N., 1°38'E.).
- 5. WNW of Ruytingen SW lighted buoy (51°05'N., 1°47'E.) moored 4.5 miles S of the Sandettie Lightvessel.

Sandettie to Noord Hinder Junction.—The main NE-bound route leads SE of Sandettie and should be used by all vessels that can safely navigate in the channel with respect to their draft. The Deep Draft Route leads NE of Sandettie. These two routes merge again NE of Sandettie. From a position WNW of the Ruytingen SW lighted buoy (51°05'N., 1°47'E.), the route leads 58 miles passing:

- 1. SE of Sandettie.
- 2. NW of Out Ruytingen.
- 3. W of the entrance to the E-bound lane of the West Hinder TSS.
 - 4. E of Sandettie N lighted buoy (51°18'N., 2°05'E.).
 - 5. ESE of F3 Lightvessel (51°24'N., 2°01'E.).
 - 6. W of Hinder 1 lighted buoy (51°21'N., 2°11'E.).
- 7. Either side of Fairy W lighted buoy (51°24'N., 2°09'E.), then 30 miles NE through the North Hinder South TSS to the Noord Hinder Junction (51°55'N., 2°50'E.).

For additional information, including graphics, concerning the above routes and their continuation into the S part of the North Sea, see Pub. 192, Sailing Directions (Enroute) North Sea (Sectors 6 and 7).

Noord Hinder Junction to Greenwich Lightvessel.—From the Noord Hinder Junction the SW route follows the SW-bound lane of the Noord Hinder South TSS to Sandettie. It then follows the SW-bound lane of the Dover Strait TSS to a position about 6 miles NNW of the Greenwich Lightvessel. The route is about 140 miles long and passes:

- 1. NW of F3 Lightvessel (51°24'N., 2°01'E.).
- 2. WNW of Inter Bank lighted buoy (51°17'N., 1°52'E.).
- 3. ESE of South Falls lighted buoy (51°14'N., 1°44'E.).
 - 4. NW of F1 lighted buoy (51°11'N., 1°45'E.).
 - 5. NW of MPC lighted buoy (51°06'N., 1°38'E.).
 - 6. Either side of Varne Lightvessel (51°01'N., 1°24'E.).
- 7. Either SE or NW of S Varne lighted buoy (50°55'N., 1°17'E.).
 - 8. SE of CS3 lighted buoy (50°52'N., 1°02'E.).
 - 9. SE of CS2 lighted buoy (50°39'N., 0°33'E.).
 - 10. NNW of Greenwich Lightvessel.

SW-bound Deep Draft Route.—The controlling depth in this route is considered to be 23m lying over a swept wreck close SE of The Varne. A maximum draft is not stipulated for this route but recommended under-keel clearances are stated below. The Deep Draft Route consists of a track joining a series of waypoints. Waypoints designated 19 to 27 follow the SW traffic lane of the Noord Hinder South TSS and the Dover Strait TSS. A section of this track, indicated by waypoints Nos. 23 through 26, leads SE of The Varne.

The waypoints of the route are designated, as follows:

- 1. No. 19 51°57.7'N, 2°37.8'E.
- 2. No. 20 51°50.6'N, 2°30.3'E.
- 3. No. 21 51°34.5′N, 2°08.2′E.
- 4. No. 21A 51°22.8'N, 1°52.5'E.
- 5. No. 22 51°11.4'N, 1°44.3'E.
- 6. No. 23 51°00.9'N, 1°25.0'E.

- 7. No. 24 50°57.5'N, 1°22.4'E.
- 8. No. 25 50°54.7'N, 1°18.7'E.
- 9. No. 26 50°45.1'N, 0°57.0'E.
- 10. No. 27 50°36.5'N, 0°33.9'E.
- 11. No. 28 50°20.2'N, 0°49.7'W.

NE-bound Deep Draft Route.—The Netherlands authorities have selected a route within the NE-bound traffic lanes of the Dover Strait TSS and Noord Hinder South TSS as being the most favorable for vessels, with drafts over 20.7m, navigating from the Greenwich Lightvessel to Europoort. This route consists of a track joining a series of waypoints. The controlling depth in this route is considered to be 27.3m lying between waypoints J and L. A section of this track, indicated by waypoints F through I, leads NW of Sandettie.

Vessels with drafts up to 22m, up to 22.6m in favorable conditions, can use this Deep Draft Route. However the recommended under keel clearances stated below should be taken into consideration.

The waypoints indicating the selected route are designated, as follows:

- 1. A 50°19.4'N, 0°02.0'E.
- 2. B 50°29.8'N, 0°58.6'E.
- 3. C 50°35.2'N, 1°13.1'E.
- 4. D 50°40.2'N, 1°21.5'E.
- 5. E 50°54.0'N, 1°28.7'E.
- 6. F 51°04.7'N, 1°40.6'E.
- 7. G 51°10.2'N, 1°44.1'E.
- 8. H 51°15.7'N, 1°53.7'E.
- 9. I 51°22.0'N, 1°58.6'E.
- 10. J 51°33.8'N, 2°20.3'E.
- 11. K 51°47.5'N, 2°36.3'E.
- 12. L 51°53.0'N, 2°44.9'E.
- 13. M 51°56.8'N, 2°53.7'E.
- 14. N 51°57.2'N, 2°51.5'E.
- 15. O 52°02.7'N, 2°41.3'E.
- 16. P 52°01.8'N, 3°53.6'E.

Vessels proceeding to Anchorage Area No. 1 (52°06'N., 2°27'E.) may go direct from waypoint K to O. Vessels proceeding to Anchorage Area No. 2 (51°56'N., 2°55'E.) may go from waypoint L to M. Vessels proceeding into the Eurogeul may go from waypoint L to N and then to P at the E end of the channel.

Deep Draft Routes.—The above NE-bound route is described in detail in a Deep Draft Planning Guide (HP8), which is published by the Hydrographer of the Royal Netherlands Navy.

There is no official Deep Draft Guide for the SW-bound route. A track, which may be followed by very large vessels, runs from Sullom Voe (Shetland Islands) to the English Channel. This track, having merged with the two-way Deep Water Route in the vicinity of the Off Botney Ground TSS, enters the Noord Hinder Junction Precautionary Area and then follows the SW-bound traffic lanes of the Noord Hinder South TSS and Dover Strait TSS. The British authorities do not endorse these two routes in every detail as both pass

through areas which have not been surveyed to modern standards.

In addition, the mandatory provisions of the Deep Water Route in the vicinity of the Off Botney Ground TSS do not apply to vessels sailing between ports on the E coast of the United Kingdom.

Both the NE-bound and the SW-bound Deep Water Routes are shown in the Mariners' Routeing Guide (Chart 5500), which is published by the United Kingdom Hydrographic Office.

Deep-draft vessels may have to make use of the height of tide in order to have a safe under keel clearance in areas where the depths are critical. This applies especially to SW-bound vessels in the area lying between The Varne and The Ridge.

The recommendations stated below have been extracted from the Netherlands Deep Draft Planning Guide for vessels using the NE-bound Deep Draft Route.

Vessels constrained by their draft should display the appropriate lights and shapes.

The passage should not be undertaken unless both the vessel's GPS and radar equipment are functioning correctly.

A pilot with experience in VLCCs should be employed for the whole route, at least for the vessel's first transit.

Accurate navigation to maintain the selected track is essential. In particular, drift and speed over the ground should be calculated in advance to help maintain the route and initiate turns correctly.

Under Keel Clearances.—The British authorities recommend the following under keel clearances for deep-draft vessels proceeding through the Dover Strait at 12 knots:

NE-bound Vessels				
Between Positions	Vessel	Under Keel		
(waypoints)	Heading	Clearance		
Toward B	072°	6.2m		
B to C	059°	6.0m		
C to D	048°	6.0m		
D to approx. 50°44'N	018°	9.5m		
Approx. 50°44'N to E	018°	7.6m		
E to approx. 51°00'N	035°	5.7m		
Approx. 51°00'N to F	035°	5.1m		
F to approx. 51°06'N	021°	5.3m		
Approx. 51°06'N to G	021°	5.1m		
G to approx. 51°13'N	048°	5.1m		
Approx. 51°13'N to H	048°	6.4m		
H to I	026°	5.0m		
I toward J	049°	6.0m		

A recent British study has shown that an under keel clearance of 9.5m is required between Vergoyer N lighted buoy (50°40'N., 1°22'E.) and ZC2 lighted buoy (50°53'N., 1°31'E.) for a vessel with a draft of 22m during SW storms.

Waypoints 20 and 21 were not covered by the study. However, a clearance of 6.1m has been recommended

between these two waypoints in winds up to force 7, 7.0m in winds up to force 8, and 8.4m in winds up to force 9.

SW-bound Vessels				
Between Positions	Vessel	Under Keel		
(waypoints)	Heading	Clearance		
21 to 21A	220°	6.0m		
21A to approx. 51°14'N	204°	5.1m		
Approx. 51°14'N to 22	204°	5.3m		
22 to approx. 51°04'N	228°	5.3m		
Approx. 51°04'N to 23	228°	6.3m		
23 to 24	204°	6.1m		
24 to 25	222°	7.6m		
25 to approx. 50°51'N	235°	7.3m		
Approx. 50°51'N to 26	235°	7.1m		
26 toward 27	239°	7.1m		

These under keel clearances only apply on the normal heading for each of the various legs of the passage. If the vessel is compelled to make a large change of course, bringing storm waves or swell on the beam, then the stated clearances may be insufficient and other measures, such as a reduction in speed, may be required.

The under keel clearances recommended take into account the course for each leg of the passage, the vessel's movement due to storm waves or swell, uncertainties in charted depths, the vessel's draft, the risks of negative tidal surges, and squat of 1m at a speed of 12 knots.

The clearance should be increased by 0.7m if the vessel's speed is 15 knots; but may be decreased by 0.6m if the vessel's speed is 8 knots.

Tide levels for the passage should be predicted in advance in order that available searoom is known in case of emergency.

The most critical area of the route is in the vicinity of the Twin lighted buoy (51°32'N., 2°23'E.). The height of tide and depth of water in this area should be obtained from HCC Rotterdam before passing Bassurelle lighted buoy.

Sandwaves.—Sandwaves encroach, in places, into the traffic lanes located in the Dover Strait and the S part of the North Sea.

Sandwaves of significance to vessels have been discovered in areas lying about 4 miles S and 3 miles SW of Bassurelle Lightvessel; between the NE end of Sandettie and Fairy Bank, 8 miles NE; within an area 2 to 5 miles NW of the NE end of Sandettie; in an area lying about 4.5 miles NW of Garden City lighted buoy (51°29'N., 2°18'E.); off the SW end of South Falls; and off the SW end of Sandettie.

Page 101—Lines 17 to 57/R; read:

Many wrecks sunk during the two World Wars lie in the Dover Strait, the S part of the North Sea, and in the Thames Estuary. Although the least depths over most wrecks critical to navigation have been established by wire sweeping, new wrecks, formerly unknown, have been found during recent

surveys. Consequently, it must be assumed that other unknown wrecks also lie within the traffic lanes.

In addition, wrecks previously covered by sandbanks may be uncovered. Strong tidal currents may also cause deep scouring into which wrecks may capsize. Generally, this results in an increase of depth over the wreck. However, a decrease in the depth over the wreck can result from the same cause.

Numerous submarine cables cross the Dover Strait and may best be seen on the charts.

The shipping lanes in the Dover Strait and the S part of the North Sea are among the busiest in the world and pose serious problems for the safety of navigation. The existence of the TSS schemes within these waters does not imply that the traffic lanes have been adequately surveyed and the existence of sandwave areas, where depths may be less than charted, should be taken into account by deep-draft vessels.

Within the Dover Strait and adjacent waters, one of the greatest risks to navigation is that of collision, especially in poor visibility. In addition to vessels transiting the TSS traffic lanes and inshore traffic zones, there are concentrations of fishing boats and recreational craft during the summer months, and regular cross-channel ferry traffic including ro-ro vessels, jet foils, hovercraft, and high-speed catamarans.

Cross-channel ferries and other vessels in the inshore traffic zones may alter course near the limits of the traffic lanes in order to cross the latter at right angles.

The main ferry ports of the United Kingdom are Folkestone (51°05'N., 1°12'E.), Dover (51°07'N., 1°20'E.), and Ramsgate (51°20'N., 1°25'E.). Ferries from these ports run mainly to Calais (50°58'N., 1°51'E.), Dunkerque (51°03'N., 2°21'E.), and Oostende (51°14'N., 2°55'E.). Most of the cross traffic is therefore concentrated in the area between Sandettie and The Ridge, 20 miles SW.

Cross-channel traffic also runs from ports in the Thames Estuary and Harwich (51°57'N., 1°18'E.) to Zeebrugge (51°20'N., 3°12'E.) and Vlissingen (51°27'N., 3°35'E.). This cross traffic tends to concentrate in the vicinity of the F3 Lightvessel (51°24'N., 2°01'E.) and the area between the N end of Sandettie and the Fairy W lighted buoy, 6 miles NNE.

It has been reported that rogue vessels traversing the TSS may be encountered, especially in the area between the MPC lighted buoy (51°06'N., 1°38'E.) and the F2 lighted buoy (51°21'N., 1°56'E.). Such vessels often proceed in a direction which is nearly opposite to that of the TSS traffic lane. Frequently this leads to nearly head-on situations in the area to the NW of Sandettie where the possibility for deep-draft vessels to alter course to starboard is limited.

All vessels should be aware that deep-draft vessels may not be able to alter course in critical areas without the danger of running aground. A good lookout should be kept for vessels constrained by their draft and showing the appropriate signals.

Vessels coming from the English Channel and bound for the Thames Estuary and the E coast of England usually cross the southwestbound traffic lane in the stretch between the S end of South Falls and the Varne Lightvessel.

Due to the set caused by cross currents, vessels frequently drift down onto buoys. Subsequently, considerable damage is

often done by vessels to the South Falls lighted buoy (51°14′N., 1°44′E.), the CS4 lighted buoy (51°09′N., 1°34′E.), and the CS3 lighted buoy (50°52′N., 1°03′E.).

Vessels using the Deep Draft Route leading NW of Sandettie should take into account the close proximity of vessels using the southwestbound traffic lane. Such vessels are recommended to avoid overtaking in the vicinity of Sandettie.

Vessels are advised to navigate with extreme caution in the area between Sandettie and the Fairy W lighted buoy as the Deep Draft Route and the main traffic lane rejoin here.

Vessels should be aware that their speed may need to be reduced in certain areas in order to reduce the effect of squat. (BA NP 28) 19/01

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